

## SEQUENCE LISTING

&lt;110&gt; Vivien Chan et al.

&lt;120&gt; NOTCH RECEPTOR LIGANDS AND USES THEREOF

&lt;130&gt; PPO-1602.002 / 200130.498

&lt;140&gt; US 09/641,612

&lt;141&gt; 2000-08-17

&lt;160&gt; 10

&lt;170&gt; FastSEQ for Windows Version 4.0

&lt;210&gt; 1

&lt;211&gt; 1752

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1

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 <211> 583  
 <212> PRT  
 <213> Homo sapiens

<400> 2

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Gln	Ile	His	Ser	Phe	Gly	Pro	Gly	Pro	Gly	Pro	Gly	Ala	Pro	Arg	Ser
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Pro	Cys	Ser	Ala	Arg	Leu	Pro	Cys	Arg	Leu	Phe	Phe	Arg	Val	Cys	Leu
	50					55					60				
Lys	Pro	Gly	Leu	Ser	Glu	Glu	Ala	Ala	Glu	Ser	Pro	Cys	Ala	Leu	Gly
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Ala	Ala	Leu	Ser	Ala	Arg	Gly	Pro	Val	Tyr	Thr	Glu	Gln	Pro	Gly	Ala
				85					90					95	
Pro	Ala	Pro	Asp	Leu	Pro	Leu	Pro	Asp	Gly	Leu	Leu	Gln	Val	Pro	Phe
			100					105					110		
Arg	Asp	Ala	Trp	Pro	Gly	Thr	Phe	Ser	Phe	Ile	Ile	Glu	Thr	Trp	Arg
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Glu	Glu	Leu	Gly	Asp	Gln	Ile	Gly	Gly	Pro	Ala	Trp	Ser	Leu	Leu	Ala
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Arg	Val	Ala	Gly	Arg	Arg	Arg	Leu	Ala	Ala	Gly	Gly	Pro	Trp	Ala	Arg
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Asp	Ile	Gln	Arg	Ala	Gly	Ala	Trp	Glu	Leu	Arg	Cys	Ser	Tyr	Arg	Ala
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Arg	Cys	Glu	Pro	Pro	Ala	Val	Gly	Thr	Ala	Cys	Thr	Arg	Leu	Cys	Arg
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Pro	Arg	Ser	Ala	Pro	Ser	Arg	Cys	Gly	Pro	Gly	Leu	Arg	Pro	Cys	Ala
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Pro	Leu	Glu	Asp	Glu	Ser	Val	Cys	Arg	Ala	Gly	Cys	Ser	Pro	Glu	His
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Gly	Phe	Cys	Glu	Gln	Pro	Gly	Glu	Cys	Arg	Cys	Leu	Glu	Gly	Trp	Thr
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Gly	Pro	Leu	Cys	Thr	Val	Pro	Val	Ser	Thr	Ser	Ser	Cys	Leu	Ser	Pro
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Arg	Gly	Pro	Ser	Ser	Ala	Thr	Thr	Gly	Cys	Leu	Val	Pro	Gly	Pro	Gly
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Pro	Cys	Asp	Gly	Asn	Pro	Cys	Ala	Asn	Gly	Gly	Ser	Cys	Ser	Glu	Thr
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Pro	Arg	Ser	Phe	Glu	Cys	Thr	Cys	Pro	Arg	Gly	Phe	Tyr	Gly	Leu	Arg
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Cys	Glu	Val	Ser	Gly	Val	Thr	Cys	Ala	Asp	Gly	Pro	Cys	Phe	Asn	Gly
305					310					315					320
Gly	Leu	Cys	Val	Gly	Gly	Ala	Asp	Pro	Asp	Ser	Ala	Tyr	Ile	Cys	His
				325					330					335	
Cys	Pro	Pro	Gly	Phe	Gln	Gly	Ser	Asn	Cys	Glu	Lys	Arg	Val	Asp	Arg
			340					345					350		
Cys	Ser	Leu	Gln	Pro	Cys	Arg	Asn	Gly	Gly	Leu	Cys	Leu	Asp	Leu	Gly
		355					360					365			
His	Ala	Leu	Arg	Cys	Arg	Cys	Arg	Ala	Gly	Phe	Ala	Gly	Pro	Arg	Cys
	370					375					380				

Glu His Asp Leu Asp Asp Cys Ala Gly Arg Ala Cys Ala Asn Gly Gly  
 385 390 395 400  
 Thr Cys Val Glu Gly Gly Gly Ala His Arg Cys Ser Cys Ala Leu Gly  
 405 410 415  
 Phe Gly Gly Arg Asp Cys Arg Glu Arg Ala Asp Pro Cys Ala Ala Arg  
 420 425 430  
 Pro Cys Ala His Gly Gly Arg Cys Tyr Ala His Phe Ser Gly Leu Val  
 435 440 445  
 Cys Ala Cys Ala Pro Gly Tyr Met Gly Ala Arg Cys Glu Phe Pro Val  
 450 455 460  
 His Pro Asp Gly Ala Ser Ala Leu Pro Ala Ala Pro Pro Gly Leu Arg  
 465 470 475 480  
 Pro Gly Asp Pro Gln Arg Tyr Leu Leu Pro Pro Ala Leu Gly Leu Leu  
 485 490 495  
 Val Ala Ala Gly Val Ala Gly Ala Ala Leu Leu Leu Val His Val Arg  
 500 505 510  
 Arg Arg Gly His Ser Gln Asp Ala Gly Ser Arg Leu Leu Ala Gly Thr  
 515 520 525  
 Pro Glu Pro Ser Val His Ala Leu Pro Asp Ala Leu Asn Asn Leu Arg  
 530 535 540  
 Thr Gln Glu Gly Ser Gly Asp Gly Pro Ser Ser Ser Val Asp Trp Asn  
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<210> 3

<211> 1307

<212> DNA

<213> Homo sapiens

<400> 3

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gcaaccctgg	ctggaaaggg	ccctactgca	cagagcgtga	gtctctggga	aggcaccgct	180
ggctcactcg	tccacgaaca	cggaccacgc	gcagggacgg	ggcttcctga	gccacggggg	240
gcttgggact	gtagagatgt	tctggtgggg	aaactgaggc	ccagaggaca	gaagtggatt	300
gctataagtc	acagctcgtc	agtggggggg	ttgggggtcaa	cgcagacatt	ttaacatccc	360
aggctgtgtt	tatccactat	cggaaactgcc	tttcttaatc	agggaggatt	ttagagacag	420
ggccaggggt	caggaagtaa	agccagtgt	acccccaggg	tgtgtgtatt	agagagggag	480
aggaggaagg	aagggaggaa	cacagagaga	gcttgtgtgt	caggggcacc	atttcaacct	540
gagttcccag	tgctggaaca	gcatcacact	gggaaacgtt	ccattttctc	tctggagctg	600
gtgtgcttga	cctctctgga	gcaaacgcct	ttccggatac	tccctgtgac	acgcaactgtc	660
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1307

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 <212> PRT  
 <213> Homo sapiens

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 35 40 45  
 Gly Trp Lys Gly Pro Tyr Cys Thr Glu Arg Glu Ser Leu Gly Arg His  
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 Arg Trp Leu Thr Arg Pro Arg Thr Arg Thr Thr Arg Arg Asp Gly Ala  
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 Ser

<210> 5  
 <211> 585  
 <212> PRT  
 <213> Mus musculus

<220>  
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 20 25 30  
 His Ser Phe Gly Pro Gly Pro Gly Leu Gly Thr Pro Arg Ser Pro Cys  
 35 40 45  
 Asn Ala Arg Gly Pro Cys Arg Leu Phe Phe Arg Val Cys Leu Lys Pro  
 50 55 60  
 Gly Val Ser Gln Glu Ala Thr Glu Ser Leu Cys Ala Leu Gly Ala Ala  
 65 70 75 80  
 Leu Ser Thr Ser Val Pro Val Tyr Thr Glu His Pro Gly Glu Ser Ala  
 85 90 95  
 Ala Ala Leu Pro Leu Pro Asp Gly Leu Val Arg Val Pro Phe Arg Asp  
 100 105 110  
 Ala Trp Pro Gly Thr Phe Ser Leu Val Ile Glu Thr Trp Arg Glu Gln  
 115 120 125  
 Leu Gly Glu His Ala Gly Gly Pro Ala Trp Asn Leu Leu Ala Arg Val  
 130 135 140  
 Val Gly Arg Arg Arg Leu Ala Ala Gly Gly Pro Trp Ala Arg Asp Val  
 145 150 155 160  
 Gln Arg Thr Gly Thr Trp Glu Leu His Phe Ser Tyr Arg Ala Arg Cys  
 165 170 175

Glu Pro Pro Ala Val Gly Ala Ala Cys Ala Arg Leu Cys Arg Ser Arg  
 180 185 190  
 Ser Ala Pro Ser Arg Cys Gly Pro Gly Leu Arg Pro Cys Thr Pro Phe  
 195 200 205  
 Pro Asp Glu Cys Glu Ala Pro Ser Val Cys Arg Pro Gly Cys Ser Pro  
 210 215 220  
 Glu His Gly Tyr Cys Glu Pro Asp Glu Cys Arg Cys Leu Glu Gly  
 225 230 235 240  
 Trp Thr Gly Pro Leu Cys Thr Val Pro Val Ser Thr Ser Ser Cys Leu  
 245 250 255  
 Asn Ser Arg Val Pro Gly Pro Ala Ser Thr Gly Cys Leu Leu Pro Gly  
 260 265 270  
 Pro Gly Pro Cys Asp Gly Asn Pro Cys Ala Asn Gly Gly Ser Cys Ser  
 275 280 285  
 Glu Thr Ser Gly Ser Phe Glu Cys Ala Cys Pro Arg Gly Phe Tyr Gly  
 290 295 300  
 Leu Arg Cys Glu Val Ser Gly Val Thr Cys Ala Asp Gly Pro Cys Phe  
 305 310 315 320  
 Asn Gly Gly Leu Cys Val Gly Gly Glu Asp Pro Asp Ser Xaa Tyr Val  
 325 330 335  
 Cys His Cys Pro Pro Gly Phe Gln Gly Ser Asn Cys Glu Lys Arg Val  
 340 345 350  
 Asp Arg Cys Ser Leu Gln Pro Cys Gln Asn Gly Gly Leu Cys Leu Asp  
 355 360 365  
 Leu Gly His Ala Xaa Xaa Cys Arg Cys Arg Ala Gly Phe Ala Gly Pro  
 370 375 380  
 Arg Cys Glu His Asp Leu Asp Asp Cys Ala Gly Arg Ala Cys Ala Asn  
 385 390 395 400  
 Ala Gly Thr Cys Val Glu Gly Gly Gly Ser Arg Arg Cys Ser Cys Ala  
 405 410 415  
 Leu Gly Phe Gly Gly Arg Asp Cys Arg Glu Arg Ala Asp Pro Cys Ala  
 420 425 430  
 Ser Arg Pro Cys Ala His Gly Gly Arg Cys Tyr Ala His Phe Ser Gly  
 435 440 445  
 Leu Val Cys Ala Cys Ala Pro Gly Tyr Met Gly Val Arg Cys Glu Phe  
 450 455 460  
 Ala Val Arg Pro Asp Gly Ala Asp Ala Val Pro Ala Ala Pro Arg Gly  
 465 470 475 480  
 Leu Arg Gln Ala Asp Pro Gln Arg Phe Leu Leu Pro Pro Ala Leu Gly  
 485 490 495  
 Leu Leu Val Ala Ala Gly Leu Ala Gly Ala Ala Leu Leu Val Ile His  
 500 505 510  
 Val Arg Arg Arg Gly Pro Gly Gln Asp Thr Gly Thr Arg Leu Leu Ser  
 515 520 525  
 Gly Thr Arg Glu Pro Ser Val His Thr Leu Pro Asp Ala Leu Asn Asn  
 530 535 540  
 Leu Arg Leu Gln Asp Gly Ala Gly Asp Gly Pro Ser Ser Ser Ala Asp  
 545 550 555 560  
 Trp Asn His Pro Glu Asp Gly Asp Ser Arg Ser Ile Tyr Val Ile Pro  
 565 570 575  
 Ala Pro Ser Ile Tyr Ala Arg Glu Ala  
 580 585

<211> 723  
 <212> PRT  
 <213> Homo sapiens

<400> 6

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			20					25					30		
Val	Asn	Lys	Lys	Gly	Leu	Leu	Gly	Asn	Pro	Asn	Cys	Cys	Arg	Gly	Gly
		35					40					45			
Ala	Gly	Pro	Pro	Pro	Cys	Ala	Cys	Arg	Thr	Phe	Phe	Arg	Val	Cys	Leu
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Lys	His	Tyr	Gln	Ala	Ser	Val	Ser	Pro	Glu	Pro	Pro	Cys	Thr	Tyr	Gly
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Ser	Ala	Val	Thr	Pro	Val	Leu	Gly	Val	Asp	Ser	Phe	Ser	Leu	Pro	Asp
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Gly	Gly	Gly	Ala	Asp	Ser	Ala	Phe	Ser	Asn	Pro	Ile	Arg	Phe	Pro	Phe
			100					105					110		
Gly	Phe	Thr	Trp	Pro	Gly	Thr	Phe	Ser	Leu	Ile	Ile	Glu	Ala	Leu	His
	115						120					125			
Thr	Asp	Ser	Pro	Asp	Asp	Leu	Ala	Thr	Glu	Asn	Pro	Glu	Arg	Leu	Ile
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Ser	Pro	Leu	Ala	Thr	Gln	Arg	His	Leu	Thr	Val	Gly	Glu	Glu	Trp	Ser
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Gln	Asp	Leu	His	Ser	Ser	Gly	Arg	Thr	Asp	Leu	Lys	Tyr	Ser	Tyr	Arg
			165						170					175	
Phe	Val	Cys	Asp	Glu	His	Tyr	Tyr	Gly	Glu	Gly	Cys	Ser	Val	Phe	Cys
		180						185					190		
Arg	Pro	Arg	Asp	Asp	Ala	Phe	Gly	His	Phe	Thr	Cys	Gly	Glu	Arg	Gly
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Glu	Lys	Val	Cys	Asn	Pro	Gly	Trp	Lys	Gly	Pro	Tyr	Cys	Thr	Glu	Pro
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Ile	Cys	Leu	Pro	Gly	Cys	Asp	Glu	Gln	His	Gly	Phe	Cys	Asp	Lys	Pro
225					230					235				240	
Gly	Glu	Cys	Lys	Cys	Arg	Val	Gly	Trp	Gln	Gly	Arg	Tyr	Cys	Asp	Glu
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Cys	Ile	Arg	Tyr	Pro	Gly	Cys	Leu	His	Gly	Thr	Cys	Gln	Gln	Pro	Trp
		260						265					270		
Gln	Cys	Asn	Cys	Gln	Glu	Gly	Trp	Gly	Gly	Leu	Phe	Cys	Asn	Gln	Asp
		275					280					285			
Leu	Asn	Tyr	Cys	Thr	His	His	Lys	Pro	Cys	Lys	Asn	Gly	Ala	Thr	Cys
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Thr	Gly	Ala	Thr	Cys	Glu	Leu	Gly	Ile	Asp	Glu	Cys	Asp	Pro	Ser	Pro
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Cys	Lys	Asn	Gly	Gly	Ser	Cys	Thr	Asp	Leu	Glu	Asn	Ser	Tyr	Ser	Cys
		340						345					350		
Thr	Cys	Pro	Pro	Gly	Phe	Tyr	Gly	Lys	Ile	Cys	Glu	Leu	Ser	Ala	Met
	355						360					365			
Thr	Cys	Ala	Asp	Gly	Pro	Cys	Phe	Asn	Gly	Gly	Arg	Cys	Ser	Asp	Ser
	370					375					380				
Pro	Asp	Gly	Gly	Tyr	Ser	Cys	Arg	Cys	Pro	Val	Gly	Tyr	Ser	Gly	Phe

385                      390                      395                      400  
 Asn Cys Glu Lys Lys Ile Asp Tyr Cys Ser Ser Ser Pro Cys Ser Asn  
                                  405                      410                      415  
 Gly Ala Lys Cys Val Asp Leu Gly Asp Ala Tyr Leu Cys Arg Cys Gln  
                                  420                      425                      430  
 Ala Gly Phe Ser Gly Arg His Cys Asp Asp Asn Val Asp Asp Cys Ala  
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 Ser Ser Pro Cys Ala Asn Gly Gly Thr Cys Arg Asp Gly Val Asn Asp  
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 Phe Ser Cys Thr Cys Pro Pro Gly Tyr Thr Gly Arg Asn Cys Ser Ala  
 465                                   470                      475                      480  
 Pro Val Ser Arg Cys Glu His Ala Pro Cys His Asn Gly Ala Thr Cys  
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 His Glu Arg Gly His Gly Tyr Val Cys Glu Cys Ala Arg Gly Tyr Gly  
                                  500                      505                      510  
 Gly Pro Asn Cys Gln Phe Leu Leu Pro Glu Leu Pro Pro Gly Pro Ala  
                                  515                      520                      525  
 Val Val Asp Leu Thr Glu Lys Leu Glu Gly Gln Gly Gly Pro Phe Pro  
 530                                   535                      540  
 Trp Val Ala Val Cys Ala Gly Val Ile Leu Val Leu Met Leu Leu Leu  
 545                                   550                      555                      560  
 Gly Cys Ala Ala Val Val Val Cys Val Pro Leu Arg Leu Gln Lys His  
                                  565                      570                      575  
 Arg Pro Pro Ala Asp Pro Cys Arg Gly Glu Thr Glu Thr Met Asn Asn  
                                  580                      585                      590  
 Leu Ala Asn Cys Gln Arg Glu Lys Asp Ile Ser Val Ser Ile Ile Gly  
                                  595                      600                      605  
 Ala Thr Gln Ile Lys Asn Thr Asn Lys Lys Ala Asp Phe His Gly Asp  
 610                                   615                      620  
 His Ser Ala Asp Lys Asn Gly Phe Lys Ala Arg Tyr Pro Ala Val Asp  
 625                                   630                      635                      640  
 Tyr Asn Leu Val Gln Asp Leu Lys Gly Asp Asp Thr Ala Val Arg Asp  
                                  645                      650                      655  
 Ala His Ser Lys Arg Asp Thr Lys Cys Gln Pro Gln Gly Ser Ser Gly  
                                  660                      665                      670  
 Glu Glu Lys Gly Thr Pro Thr Thr Leu Arg Gly Gly Glu Ala Ser Glu  
 675                                   680                      685  
 Arg Lys Arg Pro Asp Ser Gly Cys Ser Thr Ser Lys Asp Thr Lys Tyr  
 690                                   695                      700  
 Gln Ser Val Tyr Val Ile Ser Glu Glu Lys Asp Glu Cys Val Ile Ala  
 705                                   710                      715                      720  
 Thr Glu Val

<210> 7  
 <211> 685  
 <212> PRT  
 <213> Homo sapiens

<400> 7  
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 Val Ala Leu Trp Gln Gln Arg Ala Ala Gly Ser Gly Val Phe Gln Leu  
                                  20                      25                      30

Gln	Leu	Gln	Glu	Phe	Ile	Asn	Glu	Arg	Gly	Val	Leu	Ala	Ser	Gly	Arg	35	40	45
Pro	Cys	Glu	Pro	Gly	Cys	Arg	Thr	Phe	Phe	Arg	Val	Cys	Leu	Lys	His	50	55	60
Phe	Gln	Ala	Val	Val	Ser	Pro	Gly	Pro	Cys	Thr	Phe	Gly	Thr	Val	Ser	65	70	75
Thr	Pro	Val	Leu	Gly	Thr	Asn	Ser	Phe	Ala	Val	Arg	Asp	Asp	Ser	Ser	85	90	95
Gly	Gly	Gly	Arg	Asn	Pro	Leu	Gln	Leu	Pro	Phe	Asn	Phe	Thr	Trp	Pro	100	105	110
Gly	Thr	Phe	Ser	Leu	Ile	Ile	Glu	Ala	Trp	His	Ala	Pro	Gly	Asp	Asp	115	120	125
Leu	Arg	Pro	Glu	Ala	Leu	Pro	Pro	Asp	Ala	Leu	Ile	Ser	Lys	Ile	Ala	130	135	140
Ile	Gln	Gly	Ser	Leu	Ala	Val	Gly	Gln	Asn	Trp	Leu	Leu	Asp	Glu	Gln	145	150	155
Thr	Ser	Thr	Leu	Thr	Arg	Leu	Arg	Tyr	Ser	Tyr	Arg	Val	Ile	Cys	Ser	165	170	175
Asp	Asn	Tyr	Tyr	Gly	Asp	Asn	Cys	Ser	Arg	Leu	Cys	Lys	Lys	Arg	Asn	180	185	190
Asp	His	Phe	Gly	His	Tyr	Val	Cys	Gln	Pro	Asp	Gly	Asn	Leu	Ser	Cys	195	200	205
Leu	Pro	Gly	Trp	Thr	Gly	Glu	Tyr	Cys	Gln	Gln	Pro	Ile	Cys	Leu	Ser	210	215	220
Gly	Cys	His	Glu	Gln	Asn	Gly	Tyr	Cys	Ser	Lys	Pro	Ala	Glu	Cys	Leu	225	230	235
Cys	Arg	Pro	Gly	Trp	Gln	Gly	Arg	Leu	Cys	Asn	Glu	Cys	Ile	Pro	His	245	250	255
Asn	Gly	Cys	Arg	His	Gly	Thr	Cys	Ser	Thr	Pro	Trp	Gln	Cys	Thr	Cys	260	265	270
Asp	Glu	Gly	Trp	Gly	Gly	Leu	Phe	Cys	Asp	Gln	Asp	Leu	Asn	Tyr	Cys	275	280	285
Thr	His	His	Ser	Pro	Cys	Lys	Asn	Gly	Ala	Thr	Cys	Ser	Asn	Ser	Gly	290	295	300
Gln	Arg	Ser	Tyr	Thr	Cys	Thr	Cys	Arg	Pro	Gly	Tyr	Thr	Gly	Val	Asp	305	310	315
Cys	Glu	Leu	Glu	Leu	Ser	Glu	Cys	Asp	Ser	Asn	Pro	Cys	Arg	Asn	Gly	325	330	335
Gly	Ser	Cys	Lys	Asp	Gln	Glu	Asp	Gly	Tyr	His	Cys	Leu	Cys	Pro	Pro	340	345	350
Gly	Tyr	Tyr	Gly	Leu	His	Cys	Glu	His	Ser	Thr	Leu	Ser	Cys	Ala	Asp	355	360	365
Ser	Pro	Cys	Phe	Asn	Gly	Gly	Ser	Cys	Arg	Glu	Arg	Asn	Gln	Gly	Ala	370	375	380
Asn	Tyr	Ala	Cys	Glu	Cys	Pro	Pro	Asn	Phe	Thr	Gly	Ser	Asn	Cys	Glu	385	390	395
Lys	Lys	Val	Asp	Arg	Cys	Thr	Ser	Asn	Pro	Cys	Ala	Asn	Gly	Gly	Gln	405	410	415
Cys	Leu	Asn	Arg	Gly	Pro	Ser	Arg	Met	Cys	Arg	Cys	Arg	Pro	Gly	Phe	420	425	430
Thr	Gly	Thr	Tyr	Cys	Glu	Leu	His	Val	Ser	Asp	Cys	Ala	Arg	Asn	Pro	435	440	445
Cys	Ala	His	Gly	Gly	Thr	Cys	His	Asp	Leu	Glu	Asn	Gly	Leu	Met	Cys	450	455	460



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<211> 1758

<212> DNA

<213> Mus musculus

<220>

<221> misc\_feature

<222> (1)...(1758)

<223> n = A,T,C or G

<400> 8

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&lt;211&gt; 2183

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 9

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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 10

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